Before the Copyright Office

Library of Congress

In the Matter of Rulemaking	)	
	)	
Exemption to Prohibition on	)	Docket No. RM 99-7A
Circumvention of Copyright Protection Systems	)	
For Access Control Technologies	)	

Comments of the Library Associations

INTRODUCTION

These comments are submitted in response to the Copyright Office's Notice of Rulemaking dated November 24, 1999 (the "Notice"). The Notice asks whether the Office should recommend that the Librarian of Congress (the "Librarian") establish an exemption to the anticircumvention measure contained in Section 1201(a) of the Copyright Act of 1976, as amended, 17 U.S.C. § 1201(a) (the "Act"), enacted in the Digital Millennium Copyright Act of 1998 ("DMCA").

We file these comments on behalf of five major library associations, the American Library Association, the American Association of Law Libraries, the Association of Research Libraries, the Medical Library Association, and the Special Libraries Association (the "Libraries"). The Libraries serve the interests of millions of patrons for whom libraries are key — and in some cases, the sole — access points to most electronic information resources in this increasingly digital world. To the extent that this rulemaking affects our ability to serve *their needs*, they are real stakeholders in this deliberation.

The Libraries believe that this rulemaking addresses a critical issue in the future of copyright law. It will determine whether fair use and other exemptions will survive in fact as well as in law as the electronic marketplace for information grows and evolves. Further, it will impact materially as to how libraries will be able to continue to serve critically important national needs such as education, research, and the provision of health care, while assuring broad and equitable public access to the critical information resources people need to succeed in our digital information society.

We urge the Librarian to issue a meaningful exemption from the newly-adopted but not yet effective Section 1201(a) restriction against accessing copyrighted works protected by certain technological measures. A broad exception is essential if the public is to continue to enjoy uses that are in accordance with the statutory limitations long-existing in copyright law, as well as the DMCA. Fundamentally, the Libraries believe no cognizable harm could result to content owners from the exemption we propose, because the exemption would only apply to uses that are already subject to exemption under fair use and other provisions long-standing and established in the copyright law.

On the other hand, anticircumvention technologies in place or facing imminent rollout have a primary purpose, not simply the limitation of access to particular works, but more precisely the persistent control over all uses of such works. Thus, the technological measures that must be the focal point of the Librarians' review are those that will erase distinctions between "access" and "use," regulating every exploitation of a work. The impact of these types of technological measures will be to:

1. Limit sharply the applicability of the first sale doctrine;
2. Curtail the ability of libraries to archive and provide long-term access to information resources; and
3. Impede all other non-infringing activities that greatly advance the fundamental public purposes of copyright law.

The repeated claim of content providers in pressing for passage of Section 1201(a) was that "digital is different." Digital access permits making perfect copies; hence, *access controls* are needed to prevent rampant piracy of copyrighted works in a digital world. So clear was the distinction between "access" and "use" at the time of legislative consideration of the DMCA, that Congress also provided in Section 1201 the following provision:

> (c) Other rights, etc., not affected – (1) Nothing in this section shall affect rights, remedies, limitations, or defenses to copyright infringement, including fair use, under this title.

In the legislative history, the Congressional committee that introduced Section 1201(a) insisted that the provision "shall not have *any effect* on rights, remedies, limitations, or defenses to copyright infringement, including fair use." H. Rep. 105-551, Part 11, acccompanying H.R. 2281, Digital Millennium Copyright Act of 1998 (105th Cong., 2d Sess.) at 41 (emphasis added).

Nevertheless, it was the Libraries that expressed concern that the primary goal of the technological measures would be to move all users rapidly toward a "Pay-Per-View/Pay-Per-Use"[1] information world — one with electronic tollbooths on every information highway and access point. Congress echoed that concern. Id at 26. Unfortunately, the reality of the current and planned technological measures bears this out.

[1] Congress was concerned with the potential for the development of a Pay-Per-Use society, see 144 Cong Rec H2136 (daily ed. October 13, 1998) (statement of Rep. Bliley).

The Librarian should construe its authority under the DMCA to ensure a meaningful set of principles upon which the statutory permissions may continue unimpeded. If the Librarian fails in this task, there may be no way to restore their effectiveness three years hence. We are at a transition in learning and communication, with digital works rapidly integrating into the core of our national body of copyrighted works and replacing more traditional media, such as the printed word on paper. Technological measures that effectively control access *and use* of all digital works are being introduced. The Librarian's rulemaking authority in this proceeding must distinguish between technological measures that control lawful initial access from those technological measures than control use by continually monitoring access. The central reason for giving the Librarian the extraordinary authority set forth in the statute was to "ensure that none of the provisions in section 1201 affect the existing legal regime established in the Copyright Act and case law interpreting that statute." Sen. Rep. 105-190 accompanying S. 2037 (105th Cong., 2d Sess.) at 30. The Libraries respectfully submit that the Librarian's responsibility is to resolve any uncertainty concerning change of the "existing legal regime," i.e. fair use and other limitations, in favor of the preservation of the explicit limitations in law on the otherwise exclusive rights of the copyright holder. The rules that implement Section 1201(a) must place the legal burden of diminishing the vitality of these principles on those who would restrict the doctrines. This approach is essential to the maintenance of the balance that is a central premise of copyright law.

Before responding in detail to the Office's specific questions in the Notice, we would like to make the following general points that underlie our response:

Libraries are central to ensuring fair access to copyrighted works and bridging the digital divide.

Libraries serve a broad range of important public needs including education, research, and bridging the growing "digital divide" between those who do and those who do not have private, affordable access to electronic information resources. For example, as of 1998:

- 15,994 public libraries serve communities in the United States. Each year, approximately 65% of American households turn to public libraries for assistance with their information

needs. Our research indicates that over ninety percent of those libraries provide public Internet access. Over 70% of public libraries in rural areas provide public Internet access. For many people, libraries are either the only or the main source of Internet access.

- 98,169 school libraries serve as information resource centers for approximately 53 million elementary and secondary students in the U.S.

- 3,303 postsecondary and research libraries serve the educational and research needs of the nation's 15.5 million undergraduate and graduate students.

- 9,898 special libraries, including research libraries, law libraries and medical libraries, provide specialized access for students, researchers, and professional practitioners of all kinds.[2]

In other words, there is hardly a community or a population in this nation that is not directly served by libraries. Increasingly, providing services means providing access to electronic information.

National and state leaders now express alarm about the growing "digital divide." *Falling through the Net*[3], published last summer by the National Telecommunications and Information Administration of the U.S. Department of Commerce, reports on a research survey commissioned from the Bureau of the Census. The data document the important role played by public libraries in providing Internet access to underserved populations. NTIA pointed out that libraries serve as access centers for groups of people at lower income or education levels that lack Internet access at work or home. In turn, these groups are being enabled to advance economically and compete professionally in today's digital economy.

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[2] National Center for Education Statistics. *Fall Enrollment in Postsecondary Institutions, 1997.* U.S. Department of Education, Office of Educational Research and Improvement, Washington, DC, November 1999.

[3] National Telecommunications & Information Administration, US Department of Commerce, *Falling Through the Net: Defining the Digital Divide* (1999).

Furthermore, consistent with local and national policies, many libraries and schools are spending a large portion of their own budgets on technical equipment, Internet access and electronic works, and less on physical books, periodicals and other individually owned copies of copyrighted works. This trend means that the libraries and schools need to maintain fair access to the electronic works they have initially lawfully acquired in order to give their patrons the right to use information and knowledge. Any significant cutback in fair access due to technological measures means the potential drastic diminution of traditional, non-infringing uses of copyrighted works that both houses of Congress said should not be altered. This cutback in fair access — accentuated for those on the "other side" of the digital divide — cannot be ignored by the Librarian in this proceeding.

Fair use, library, archives and educational limitations in the Copyright Act are key to the ability of the libraries to serve social needs and public policy.

Copyright law is crucial in defining the roles of libraries and educational institutions as information access providers. For instance, under the "first sale doctrine," 17 U.S.C. §109, Section 109 of the Copyright Act of 1976, libraries are allowed to loan to their users information products that they purchase. Section 108 of the Act, 17 U.S.C. §108, allows libraries (a) to make single copies of works in their collections available to patrons engaged in private study, research and scholarship and (b) to archive and preserve works for long-term access. Section 110 of the Act, 17 U.S.C. §110, contains provisions intended to facilitate in-class and distance learning. The Fair Use provisions in Section 107, 17 U.S.C. §107, allow users to exploit fully their access to information resources for purposes of education, research, criticism, and other socially beneficial purposes. Section 121, 17 U.S.C. §121, contains limitations that ensure the reproduction and distribution of copyrighted material for use by blind and handicapped people. These and other provisions in the law serve as basic underpinnings for the critical public information services provided by libraries and educational institutions.

These provisions are vital elements of copyright law, rooted in the Constitution and in three centuries of common law interpretations. The preservation of these principles should be the

primary goal of all undertakings in this proceeding. Any chilling of these principles through technological measures controlling use would seriously and irreparably harm the ability of libraries to serve public needs. The Libraries believe such harm is presumptively "substantive" because of the corrosive effect such a loss would have on the historical functions of libraries and education in American society.

Technological measures will be determining the uses of copyrighted works that have traditionally been decided by federal judges.

Fair use has evolved as the centerpiece of a series of carefully considered, sensitive balances between the exclusive rights given by copyright law to creators of potential works and the ability of the public to make non-infringing use of copyrighted material without prior approval of the copyright owner. Fair use considers the purpose of the taking, the nature of the work, the amount of the work used, and the effect of the use on the potential market for the work. None of these factors are considerations that could or should be controlled by hardware or software developed exclusively by the copyright owner.

Only if a magical chip with the fairness and wisdom of a diligent federal judge could be incorporated into the digital controls would the voice of the public interest be heard. This is not what content providers have suggested would be the case. Indeed, since content providers create technological measures to serve their own interests and concerns, there is no reason to presume that such controls should or would be flexible and amenable to fair use and other limitations. In fact, quite the opposite is true; our research into the plans for state of the art technological measures indicates that they will erode substantially user-oriented policies.

The Libraries believe that an exemption meaningful enough to preserve fully fair use and other limitations would encourage content providers to create technological measures that are flexible and respectful of traditional copyright balances. Such an approach by the Librarian would be a forward-looking incentive, intended to influence the measured deployment of new technology, rather than an after-the-fact exemption that legitimizes breaking into a protected work.

Section 1201 expands the boundaries of criminal law in ways that are vague and poorly defined and that cover acts that are legal, acceptable behavior.

The language of Section 1201(a) contains troubling ambiguity in key terms. First and foremost, the most crucial term in the section, "technological measures," spans a vast range of possible control mechanisms. The vagueness permits parties to suggest that "technological measures that effectively control access" could range from simple, age-old techniques, such as a library card, to advanced, multi-bit encryption technologies that have yet to be field-tested.

The ambiguity is exacerbated by the distinctions in Section 1201 between "technological measures that effectively control access to a work protected under this title" [subsection (a)] and "technological measures that effectively protect a right of a copyright owner under this title" [subsection (b)]. The statute distinguishes between the two, but as we will document, the technological measures being marketed do not. Works protected by technological measures that attempt to control "access" when they are really controlling "rights" or "uses" are not covered by Section 1201(a).

Thus, the task of the Librarian in this proceeding is to interpret statutory terminology in light of copyright policy. Similar ambiguities exist with terms like "circumvent," "access" and "class of works." There are few legal precedents interpreting these terms to guide their application, nor is the legislative record much help.

Although court decisions may, over time, help clarify some meanings, library users meanwhile face criminal[4] and civil penalties for exploitations of works in ways that heretofore have been considered to be non-infringing and legal. Uncertainty, when the stakes are that high, will almost surely exert a chilling effect both on individuals and on the institutions such as libraries that serve their information needs, thus inhibiting legitimate, non-infringing use of material for education, research, criticism and other public information uses.

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[4] Although 17 U.S.C. §1204(b) exempts nonprofit libraries, archives and educational institutions from the criminal sanctions, patrons and other users are not exempt.

This rulemaking can help clarify this situation by exempting what has been and is acceptable and reasonable conduct — unauthorized, non-infringing use.

Some technological controls, if implemented in ways that are currently under consideration by the industry, will create a significant intrusion into privacy and private use.

Certain technological measures will not only constrain private uses by individuals in the home, libraries and schools, but also, by facilitating the collection of data on private use and electronic habits, service providers will stealthily secure myriad facts on the information practices of users. The types of technological measures deployed or about to unfold are documented in the detailed technology analysis in response to Question 1. One current example of a technological control with material privacy implications includes the recently abandoned DIVX format for distributing DVD based movies. The home DIVX player required users to have continual telephone contact with a central database that would maintain transaction records of DIVX viewing from each home. Privacy remains such a concern that the Internet advertising firm, DoubleClick, Inc., recently published an open letter to the public indicating it would attempt to address privacy needs of Internet users. DoubleClick's practices are currently under scrutiny by several state governments and the FTC. A class action lawsuit was initiated in Dallas, Texas on February 9, 2000, against Yahoo! Inc. and Broadcast.com over privacy concerns.

DIVX and similar technology raise very serious consumer privacy concerns. Moreover, since the transactions being recorded are private information transactions of individuals, the Libraries have a particularly intense concern about the impacts of such practices on intellectual freedom. This concern is widely shared by the public and by the government, as evidenced by existing Federal law protecting transaction records of cable and video rental stores.

We believe that it is essential for the Librarian to create a meaningful exemption before Section 1201 does irreversible harm to copyright limitations.

The Libraries do not underestimate the complexity of the Librarian's task. This rulemaking requires the Librarian to look not only at the present but also into a crystal ball to discern the future, predicting whether harm would be likely to occur in the next three years. Congress was deliberate in putting prospective analysis into this section of the DMCA.

Advanced technological measures restricting use are now being designed, developed and implemented in the marketplace. Congress had the foresight to instruct the Librarian to construct a ruling based on reasonable potential adverse effects in the next three years, not just actual harm today. The Librarian's ruling will influence technological choices before they are deployed and before adverse effects are experienced. One statutory benefit could be to encourage industry to develop measures that are "fair use and limitation friendly," technological controls that would have a less severe impact on users engaged in non-infringing uses.

Fundamentally, the task of the Library is to ensure that the statutory limitations are not lost in a digitally complex world. The record will reflect the urgency of maintaining fair access to works to facilitate fair uses. The copyright law demands such balanced access as the price for the exclusive rights otherwise granted to owners.

ANSWERS TO THE NOI QUESTIONS

A. Technological Measures

1. What technological measures that effectively control access to copyrighted works exist today?

There is limited guidance in the DMCA or its legislative history to help us define precisely technological measures that effectively control access. The definition that is stated in the law itself, that a measure "…requires the application of information, or a process, or a treatment…to gain access to the work," is very broad. Indeed, the Association of American Publishers suggests that even a "common library card" can be construed to be a technological access control measure![5]

In the Libraries' view, the potential breadth and generality in defining "technological measures that effectively control access" is a very troubling aspect of section 1201(a). The uncertainty casts the shadow of federal criminal sanctions over a wide and indecipherable range of situations and activities, many of which take place in libraries and many of which would be lawful under fair use and other limitations extant in copyright law.

Moreover, as noted above and discussed in detail below, many technological measures serve multiple purposes, often at the same time; i.e. they can control access and use simultaneously. The latter — control over use — is outside the scope of Section 1201(a).

In our investigation of technological measures, which we discuss below, we focused much of our attention and concern on a wide range of controls just now being developed and deployed by content providers. However, it will be important for the Office and the Librarian to bear in mind both the possibility that courts will be asked to define "technological measures that effectively control access" so broadly as to include common library cards and the implications for Section 1201 of their doing so.

Another important point is that the leading edge of technological controls is moving very rapidly. We found many technology firms — some of them large like Xerox Corporation or IBM, many of them small, entrepreneurial start-ups — developing technological measures and marketing them to the content industry. This means that a well-conceived rule promulgated now by the Librarian will likely influence the directions of this new technology and the way content providers deploy it.

Perhaps most importantly, *our research has also indicated that many of the more sophisticated technological measures eagerly sought by content providers have a fine grain capability to control access continually, even after a work has been lawfully acquired*. As we will describe below, these technological measures blend access control inextricably with control over use, making it impossible to separate "access" from "use" for purposes of Section 1201(a). In other words, technological measures define a user's "accessing a work" as not only initial access, but

accessing for purposes of printing, copying, extracting, or even viewing or reading. Thus, the library patron who is using a lawfully acquired work and who circumvents a technological measure for a certain types of lawful, copyright uses, could be exposed to prosecution under Section 1201(a) because each "use" requires an additional "access" under the control of the technological measure.

As the Libraries will emphasize throughout, technological measures affecting control of rights of owners are outside the scope of 1201(a). Further, the blurring of any distinction between "access" and "use" was certainly not the intent of the Congress when it passed the law. The key legislative committees all expressed their views on the fact that access prohibition should not affect all other rights, remedies and limitations in the Act. The intent of Section 1201(c)(1) was that once a work had been lawfully acquired (that is, "accessed"), circumvention by users to engage in lawful non-infringing uses as defined in the copyright law would not be prohibited by Section 1201(a). Due to the persistent nature of advanced technological measures, fair usage could fall dramatically. Without a meaningful exemption from the Librarian, Section 1201(a) will cause significant, irreparable harm to users attempting to make lawful, non-infringing use of works protected by technological measures.

Technologies currently available or in development for the protection of digital intellectual property include symmetric and public key encryption, digital watermarks and fingerprints, digital signatures, digital certificates and vouchers, cryptographic envelopes, and software and hardware designed to control usage of digital content.

In practice, no single tool or combination of tools has yet become prevalent, in part because many of the available methods are new and only beginning deployment. Content sellers also have different interests and content protection criteria, requiring flexible combinations of protection technologies to support various business models. Because so many tools are now available and the intentions of content sellers are so diverse, technological control schemes are subject to many permutations, and only a fraction of these have yet reached the market. However, comprehensive protection measures are being deployed or developed for nearly every type of digital information or entertainment industry, including book and journal publishing,

databases, music and video. Many corporations are also currently offering end-to-end solutions for selling, protecting and tracking of encrypted digital products. These new protection schemes will provide content owners with unprecedented control over access and use of intellectual property, preventing copying or redistribution or use for any purpose while allowing many new opportunities for profit.

Based upon our research, we identified three broad categories of controls. Briefly, they are as follows:

Category I - Simple Access Control Measures: When technological protection measures were first introduced, they were characterized by Simple Access Control Measures that allow content sellers to restrict access to their products to authorized users, without any further technological barrier to restrict copying or redistribution by the user. They may limit access to a particular machine, or to a community or class of authorized users, or to individual customers. These technological measures include the use of passwords or encryption.

Category II - Persistent Access and Usage Control Measures: The technological measures that are and will continue to be prevalent in the next three years are Persistent Access and Usage Control Measures. These technologies control the digital product at every step of the process from initial access to distribution to re-access to use. These types of systems generally employ one or more forms of encryption to protect the content and associated permissions and identification information. Persistent access control systems also require software or hardware methods for enforcing attached usage rules, metering and tracking use, and authenticating users and payment. Category II systems have the real potential of seriously impeding research and public use of information, because they can provide content sellers with complete control over use, distribution and pricing of information products, often with users being unable to determine what are the true costs of specific uses. Persistent control requires either a secure hardware device or some method for overcoming the commands typically available in the operating systems of personal computers or other general-purpose devices (print, copy, cut, etc.).

Such technological measures are by their nature complex and provide secure transmission, authentication, and use. The flexibility of the available usage rules allows content providers to extract maximum value through various business models such as pay-per-use sales, since the systems can be engineered to meter usage and change status after a number of uses specified in advance.

These types of technological measures can also restrict usage to a particular user or user device by using a unique identification. This capability allows "superdistribution", the redistribution of content in encrypted form. As a content user forwards a work to friends or colleagues, the usage rules and encryption remain in place, *requiring each new recipient to pay before viewing any part of the content.* Alternately, a content seller may widely distribute the protected file in the hope that some percentage of recipients will choose to pay for use.

These types of persistent access controls can be used to control fair uses and users of works and, thus, undermine lawful non-infringing uses. Electronic books with superdistribution controls would undermine the very concept of a library as an institution that lends and provides no fee availability to information.

Category II systems also raise significant privacy issues, because in their tracking and recording of transactions, they can create an indelible trail of an individual user's information access history. Although not a core issue for copyright, this technological capability is of great concern to the Libraries because of the implications for intellectual and academic freedom.

Category III - Persistent Marking and Identification Technologies: These technologies are means of marking digital works in ways that identify them, that persist with them, and that do not affect the usability of the product. "Digital Watermarks," "Digital Signatures," and "Digital Object Identifiers" are examples of such methods. Although persistent identification methods do not by themselves prevent access to any digital work, these measures can interact with technological measures as a component of persistent access control schemes, either as triggers preventing use not authorized by content owners or as an additional protection if access security fails. Thus, although Copyright Management Information (CMI) is most

directly the subject of section 1202 of the Act, to the extent that CMI is used in concert with a technological protection measure, it brings CMI under the purview of Section 1201.

2. Do different technological measures have different effects on the ability of users to make non-infringing uses? Can and should the Librarian take account of those different effects in determining whether to exempt any classes of works from the anticircumvention provisions of Section 1201? If so, how? In determining what constitutes a class of works?

Technological measures have very different effects depending on the nature of the control mechanism and the business model underlying its use; that is, what type of charging structure does the seller wish to enforce? The Libraries contend that certain technological measures will be used not simply or even primarily to prevent piracy; rather, they will be deployed to change the way information is marketed and the way it is paid for. Basically, Category II and Category III systems are designed to facilitate a metered, pay-per-use model for works in electronic form.

These measures are being advanced by content providers as flexible technologies, able to support a variety of usage models. Persistent Access and Usage Control Measures may set usage rules to control or prevent copying, redistribution or any other use beyond limits defined in advance by the content seller, all in contravention of Section 1201(c)(1). In the immediate future, content distributors will have unprecedented power to restrict usage in pursuit of various business models, including pay-per-use, superdistribution and time-limited or metered usage. We believe that these restrictions on what have been lawful and necessary uses will have a negative impact on the use, production, preservation and distribution of information.

Even the simplest technological measures have a potential impact on the traditional role of libraries in archiving and conserving information, since digital materials may become inaccessible once a subscription expires. Persistent Access and Usage Control Measures have a more invidious effect, because the user never has real control over the encrypted information. The content may even remain protected years after it would normally enter the public domain; yet, under more restrictive interpretations of Section 1201(a) librarians may be legally prohibited from gaining access to use of the works. Although some publishers promise to preserve their digital materials, not every information source will act so responsibly. Experience suggests

information products will be discontinued, publishers will fail, and vital digital information will be lost or forever locked away.

Category II and Category III systems now appearing on the market will also certainly have negative effects on research and scholarly uses of information. Established copyright law recognizes the social benefit of the doctrines of "first sale" and "fair use" for evaluation, distribution and production of information. Content owners will now have the ability to curtail these doctrines in advance through usage rules disguised as "access" control. Without purchasing permission, users will be prevented from copying, distributing or using purchased content for any purpose.

As Pay-Per-Use and related models become more prevalent, researchers face new costs with each step of the research process, and cost disincentives discourage some projects. For example, medical researchers could face potential new costs for every piece of information reviewed in the course of researching an illness. Technological obstacles to fair use may also foreclose necessary critical and evaluative activity, affecting the quality of available research materials. Technological measures will further impose significant new obstacles for educators attempting to make fair use of published information.

The effectiveness of libraries as research and public service institutions is similarly threatened by new technological measures. Usage rules will limit the number of uses or the time in which content is available. Content distributors can also prevent libraries from loaning materials to other institutions or their own patrons. Instead, publishers may choose a "superdistribution" model, collecting revenues from each new user as content is redistributed. Although some business models are untested, systems of this type have been developed and marketed for the distribution of digital music, video, and electronic texts. The widespread deployment of Pay-Per-Use systems could effectively reduce libraries from repositories of valuable knowledge to mere marketing platforms for content distributors.

In any case, persistent technological control measures present new barriers to use of publicly distributed information. The deployment of these measures diminish many of the advantages of

networked digital information (including linked information and searchable texts), while eroding existing copyright doctrines responsible for innovation, education and public discussion. The effects will be most severe for researchers and the financially disadvantaged, the latter who will now face an increasing information inequality. However, the disruption of the circulation of information will ultimately affect all library patrons and the society as a whole. The Librarian should take these potentially severe and undesirable effects into account by providing a clear exemption for all lawful uses of materials commonly used by libraries and their patrons.

The Libraries recognize that technological measures that restrict usage under the guise of access controls have particularly deleterious effects on the ability of users to make non-infringing uses of works. The Librarian should take such fact into consideration, particularly because the statute itself differentiates technological measures controlling "access" from those controlling "rights" or "use." Works protected by the latter technological measures should be outside the scope of Section 1201(a) or otherwise defined as particular classes of works qualifying as exempt.

The Libraries also wish to emphasize that the prohibition *only* applied to "works protected under this title." This means that no public domain or federal government works, or works subject to the newly devised limitation in Section 108(h), should be covered.

In sum, the Libraries believe several criteria should be considered when determining particular classes of works; specifically, the criteria are:

- Whether the content of the digital version of the work is identical to (or perhaps "has no more than trivial variations from") a readily available version that is not subject to access control
  measures;
- Whether the technological measure controlling the work regulates "access only" or whether it fails to separate "access and use" controls;
- Whether the digital version of the work was initially lawfully acquired by the user;
- Whether the nature of the proposed use is lawful and non-infringing under current copyright law;

- Whether the work is public domain, a federal government work, a Section 108(h) work or otherwise not protected by the Act;
- Whether the work is being preserved or archived.

B. Availability of Works

3. How has the use of technological measures that effectively control access to copyrighted works affected the availability of such works to persons who are or desire to be lawful users of such works?

Technological measures can have a devastating impact on the ability of users who wish to engage in lawful uses of works, such as those uses allowed under Sections 107, 108, 110 and 121 of the Copyright Act. As previously explained, the dual purpose of many technological measures is not simply to control "access" to works, but also to control use. Thus, through these technological measures, *owners can pre-select who has access to works and the level of the patron's use*. In other words, these technological measures can restrict not only the right to review the work, but also can permit viewing of only a part and can prevent the ability to copy the work or further disseminate it, unless each use is paid for. These measures can also set time limits on review, so that those who are slower to absorb information on a computer screen can be shut off from access as the time limit expires.

The restrictions imposed by such technological measures are one of the recognizable features of the digital divide. If a "Pay-Per-Use" model is the paradigm facilitated by technological measures, then not only will the poor face the problem of having inadequate technical equipment, but also they will find that simply having the devices that can decipher the works is not enough. Category II systems are sophisticated technological gatekeepers that can deny access to, and therefore the ability of the public to make non-infringing use of information, at any point along the digital highway. If one cannot make fair use of a work — reciting choice elements of its content, for example — because technological measures block access after a period of time or until a payment is made, then non-infringing users who are statutorily entitled to no fee access and use under the limitations of the Act are materially and irreparably harmed.

Over the past several weeks, the Libraries collected information from many of its members on the impact of technological measures. Among the comments received were the following:

- "Walk in" library users are unable to access many works. While historically all users of the library – especially the public library – have access to materials purchased by the library, some works protected by technological measures require passwords or library card numbers that the "walk-in" user simply does not have.
- Teachers and students engaging in distance learning activities are actively blocked from accessing works that are purchased by the library, but that otherwise are not accessible outside of the library. It is not just audio-visual works that raise certain distance learning issues, but also periodicals and texts that have Internet protocol (IP) location limitations.
- Faculty, researchers and students are denied access to many copyrighted works from their home or office although these individuals are authorized users and the materials to which they seek access were acquired by the library through license agreements.
- The denial of access cuts across all categories of works.
- Faculty and students, who are located in rural settings without the benefit of a local library for reference or interlibrary loan services and who rely on bibliographic indexes and journals, cannot use electronic resources that the organization subscribes to because the IP address or domain name of the distant user is not included in the organization's set of addresses.

4. Are there specific works or classes of works that, because of the implementation of such technological measures, have become unavailable to persons who desire to be lawful users of such works? If so, identify those works or classes of works and explain how they have become unavailable.

The American Library Association and the Medical Library Association survey of member libraries revealed that technological measures are currently being used on all digital classes of works including online encyclopedias and other online reference works, online full-test journals, online books, online newspapers, online databases, CD-ROMs, videos, and online image collections.

Technological measures, in the form of Category I and II controls (see answer to question 1 above), are commonly applied to text, single images and data works. Some of these works, such

as articles, photographs, reports, etc., may be available in printed formats, so the application of the technological measures cannot be said to bar all right of access. However, three important trends greatly aggravate the prospect for a heightened need for ready access to these and other similar works.

1. A number of works are available only in digital format. Some publications do not have a print analog, so the only way to get them is by buying access to the electronic version.
2. As many institutions have invested heavily in technology, they are moving away from the printed versions and relying on the versions that are readily accessible online or in digital format. Hence, the short-term availability of printed works is diminishing, as the electronic versions increase.
3. Because the electronic versions have cost-saving features for publishers (savings in printing, mailing and distribution), there is a trend toward releasing works in digital format. As electronic books become more popular, the Libraries foresee the day when course packs will be published in electronic format. Access, use and redistribution controls can — and we believe will — be built into the works, greatly restricting appropriate use of such works.

5. Are there specific works or classes of works, which because of the implementation of such technological measures have become less available to persons who desire to be lawful users of such works? If so, identify those works or classes of works, explain the ways in which they have become less available, and explain whether those works or classes of works are also available in other formats to which such technological measures have not been applied.

An increasing number of works are burdened by technological measures that limit lawful use. Our study disclosed this examples:

- Many databases are available on only one computer in a library. As a result, only one user can dial in at any one time. This can actually make works *less accessible* to the public. The *Nature* web site bundles together several journals online that are password protected. Only one individual can use the site at any one time. This means that even though all the journals were lawfully acquired, a single patron using just one of the purchased works effectively blocks use of all the other journals available from the web site. In the print world, each issue could have a separate user. Considering copyright law and non-infringing uses, there is no rationale for preventing multiple users of different journals at the same time.

- Many databases include technological measures that limit the number of users. If five users are allowed access, number six cannot make any fair use.
- Certain electronic versions include materials not available in the print format. For example, *Encyclopedia Britannica Online* has textual materials not included in the print version. Thus, pulling the bound work off the shelf is not a suitable alternative.
- Libraries find that electronic versions are updated more frequently than print versions, thus leaving those using only printed works "behind" — on the other side of the digital divide.

Librarians around the country remarked in more detail:
(1) "Limiting access to full text journals with a password, for example, discourages a significant number of users from obtaining the information that they otherwise would have obtained and used. Limiting access to a given number of users slows down the process and some users may give up before obtaining the information. Limiting access by IP range may prevent, or make it more difficult for, authorized users from accessing information remotely." (Wayne State University)

(2) "Because of restriction of the number of users that can use a resource at any time, our students and faculty are forced to do their research late at night during off-peak hours for some of our resources. During normal waking hours our use of some resources is "maxed out." In other cases we simply are unable to provide access to certain digital resources, and our students and faculty have to arrange to visit colleagues at other schools who have these resources, or ask colleagues at other institutions to provide research assistance when possible. The bottom line is that scholarly, scientific, and medical information is threatening to become more restrictive and difficult to obtain." (University of Texas Libraries)

(3) "We are a school district. All technological and legal measures controlling access to information affect what students and staff can use. And I would like to add that some technological measures have caused us so much difficulty that we have not used the product. Computer networks can be very fragile in the school setting. An example of this was a version of the World Book CD that matched the CD with the search engine so that the CD had to stay

with a designated machine on the network: a situation unmanageable in the school setting." (Topeka Public Schools)

(4) "Our primary clientele who are located in rural settings without the benefit of a local library for reference or interlibrary loan services cannot use the paper formats unless an individual 'calls' a library for mediated service to access this information." (University of California, Shields Library)

(5) "Our users, while predominantly the faculty, students and staff of the University of Michigan Business School are not our only users. We also have users from other parts of campus and from outside campus as well. Their access is more barrier-laden technologically and psychologically. While they can use print, if we have it, increasingly we do not carry both formats either because they are not available or because they are beyond our budgetary means." (University of Michigan Business School)

(6) "Technological restrictions (limiting access to specific IP addresses) are the equivalent of 'chained books.' Example: the AAAS journal, *Science*, provides access only to a specific machine address (like saying that a print journal can only be used at a single table.)" (Ohio University)

(7) "We access several journals online from one publisher who password protects their site (*Nature*). It is set up for one user at a time. So all journals are tied up while one person looks at one, although he/she could browse all of them. They are all unavailable while that one person uses the collection." (Creighton University)

(8) "We have tried to avoid resources that are so strictly tied to a low number of users. We do, however, subscribe, by necessity, to several online databases that limit the number of users (*PsycLit, SportDiscus, World News Connection*). We cannot afford to increase those numbers in some cases, and consequently we put up with waiting for access until the resource is freed up. We have either pitched the print equivalents of these databases, or never had a print equivalent." (Creighton University)

6. If there are works that are available both in formats to which technological measures have been applied and in formats to which technological measures have not been applied, to what extent can the works in the latter formats substitute for the works in the formats to which technological measures have been applied?

The Libraries are very skeptical of a ruling that suggests that the availability of a work in alternate non-protected formats obviates the need for an exemption.

Generally speaking, to users and to the libraries that serve them, *works in different formats need to be considered to be different works, not as equivalent for the purposes of this rulemaking*. Different formats of works have different user characteristics, and can facilitate different types of uses, as the following paragraph illustrates.

A paperback version of a book is cheap, portable, and in some sense disposable, with little archival value. A hardcover version of the same book usually has larger type and is more readable. It will have longer-term survivability. An electronic version, if in a proper text format, can be studied and analyzed by scholars using computer-based analytical techniques. A PDF or page image version can be viewed on-line with all its original appropriate illustrations and formatting. Of course, versions on tape or in Braille may exist to serve the needs of the sight impaired. Furthermore, given the rate at which technological formats become obsolescent, even alternative electronic formats cannot be considered as equivalent to each other. Older technological formats may offer inferior quality or require equipment that is no longer easily available. This rapid technological evolution of formats creates problems not only in making works accessible over the long term, but also in archiving works.

Finally, our analysis indicates that technological controls may allow providers to move to a price and market discrimination business model. If so, individual users may be faced with a choice between second-class but affordable products and very expensive, "deluxe" forms of that product. To the extent that the value added to the high-priced version affects the usability of the product, libraries will need to provide access to that format. If not, the digital divide between

those who have access to electronic information services and those who do not would be greatly exacerbated.

7. Are there works or classes of works that are available only electronically and only in formats to which such technological measures have been applied? If so, what are they?

There is a wide range of works that are available only in electronic form and with technological measures that effectively control access. To identify a few:

- Photo databases (*AP Photo Archive*)
- Bibliographic databases (*Expanded Academic Index*, *CARL Uncover*, *ArticleFirst* and *EBSCOHost*)
- Current events and newspapers (like *National Newspaper Index, Ethnic Newswatch, Global NewsBank*)
- Subject bibliographic indexes (*Agricola, International FilmArchive*, *Literature Online, Literature Resources, Bible In English, Aerospace Database, International Index to Black Periodicals, GenderWatch, AIDSLINE - AIDS International Online, HealthSTAR,CrossFire Beilstein / Gmelin*)
- Image archives (*AMICO* - Art Museum Image Consortium)
- Data sets (*Sociometrics Social Science Electronic Data Library*)
- Electronic journals (*Die Deutsche Lyrik im WWW, Dictionary of Old English Corpus in Electronic Form, Ethnologue: Languages of the World, Emerald Intelligence and Fulltext Electronic Library, JSTOR, Public Lands News*)
- Other electronic texts (*American Verse Project, Electronic Text Collection* at the University of Virginia, *Victorian Women Writers Project*)

Further, it may be argued whether *Expanded Academic Index* is only available electronically. We believe so, even though one might find a number of print indexes that cover many of the citations in that index. Similarly, *Lexis-Nexis Academic Universe* is a protected electronic work that contains court cases, press releases, newspaper articles, among many works. One would have to engage in an enormous amount of research to find all of the collected material in any one place. Another example would be *Encyclopedia Britannica Online*. Even though there is a print

version of this work, the online edition has materials (photos, commentary, links to other resources) not found in the print.

This answer does not attempt to offer an exhaustive listing of such works. If anything, their numbers will grow substantially in the next three years. Moreover, there may be parts of one or more of the above works or collections that are accessible in print form. What is common to all these and many other works is the fact that they are significantly if not entirely available in electronic form protected by technological measures.

C. Availability of Works for Nonprofit Archival, Preservation, and Educational Purposes

8. Has the use of technological measures that effectively control access to copyrighted works affected the availability of such works for nonprofit archival purposes? If so, how? Are there specific works or classes of works that have been affected in this respect? If so, identify them, explain how they have been affected, and explain whether those works or classes of works are also available in other formats to which such technological measures have not been applied.

There has been or will be in the coming years a dramatic loss of content that nonprofit archives traditionally preserve. First, if a technological measure prohibits reproducing a work, an archive or library may not have independent access to the published work. Unlike the situation where an institution buys a subscription and has a print copy of a newspaper, book, or periodical on its shelf, in the electronic world, no individual copy exists at the institution. If the library cannot make a copy, because the technological measure prohibits it, then no archival copy may exist.

In response, content proprietors may argue that they will serve that archival function. To the extent that server capacity has risen dramatically in recent years, content owners have a greater likelihood of being able to serve the archival function. However, experience has taught libraries and archives a bitter lesson — even though publishers *should* archive their own works, more often than not, they *do not*. Even works as expensive to produce as feature motion pictures have been lost due to the carelessness and unconcern of producer/owners. Many publishers only offer databases going back five years or less. Earlier years are neither archived nor accessible.

Further, if publishers are the sole source for archival copies of their works, co-opting the library/archives function, there is a greater risk of *selective archiving*. Materials deemed appropriate may be preserved, but works viewed by publishers as less useful or even contrary to their interests might be destroyed. The Libraries believe it is not in society's interest for the archival function to belong solely to the publisher. Independent judgments of professional archivists and scholars should be brought into consideration, lest narrower views prevail and too selective an amount of content be archived for the future. Thus, while not every library or every archive needs to have a preservation copy of every work, the judgment of publishers regarding what works to archive and what to destroy should not be the only one allowed.

It is particularly urgent as the technological measures are given initial protection in this new statutory regime that a mechanism be created as well so that all categories of works have a preserver. For the foregoing reasons, it is imperative that specific archives be authorized to take their own effective measures to ensure preservation of classes of works, irrespective of the intention or commitment of the publisher.

Second, another archival hazard associated with technological measures is that unless an archive or library is a continuous, authorized user, it will be denied access even to works it previously and lawfully acquired. This is an injustice of the anticircumvention systems that the Librarian should correct. *As long as a user has had initial lawful access to a work, it should be permitted to re-access that work for fair use and other uses permitted under copyright law.* The concept of re-accessing particular works for fair use and other non-infringing purposes is fundamental in copyright law. Technological measures that can control and meter access and use should not be allowed to undermine these essential copyright principles.

Third, unlike situations where nonprofit institutions could acquire works second-hand or by donation, there may be no secondary market for electronic works. Technological measures can regulate the redistribution and use processes, undermining core copyright concepts, such as the first sale doctrine and the lending right of libraries. Developing a balanced approach to these copyright principles in an electronic world may take some time. However, if the Librarian fails

now to adopt rules that facilitate certain types of redistribution despite technological measures, then the harm to our own educational preserves could be very dramatic.

Our member libraries give additional explanations of the archiving difficulties:
(1) "In most cases we have little or no real assurance of the future availability of digital works, and no legal or licensed rights to locally archive the material. We are entirely at the mercy of the publishers' terms and their archiving abilities. Examples of works without a printed equivalent are the *ABI/Inform* database, the *Bibliography of Asian Studies* database or products from full-text aggregators like *Lexis-Nexis, Dow Jones Interactive*, etc., and the various e-journals which are electronic only and have never been published in print. We have had to return tens of thousands of dollars worth of CD-ROMs to vendors like Standard and Poors when our subscriptions ran out — leaving us with no archival data for many years of business information. The price of purchasing this archival information in another format is simply prohibitive and the data is simply no longer available to the economists and MBA students on our campus." (University of Texas Libraries)

(2) "*Expanded Academic Index* is not available in print. We have no control over the backfiles if the Gale Group decides to discontinue access. We cannot archives backfiles ourselves." (University of Nebraska - Lincoln)

(3) "Maintenance of past issues and older information is definitely a problem. Often items that are received through CD-ROM subscriptions must be returned when a newer CD-ROM is received. Also, if the library discontinues a subscription, or the vendor switches formats, the library is often left with inaccessible information." (Noblesville - Southeastern Public Library)

(4) "Many publishers especially the professional societies, will not allow the archiving of the digital forms of their journals. They are forcing libraries to maintain both the print and digital formats of their journals, in order to maintain current levels of fair use, and current ability to provide archives, along with offering users the enhanced access of the digital formats." (University of Arizona Library)

(5) “One can simply not be sure that a service one subscribes to will continue offering archived copies. Our *PALS Network* just dropped its 1993 full text.” (Concordia College)

(6) “*ProQuest* illustrates the problem. This aggregator is subject to sweeping changes in content, so the full-text magazine content might vanish from one day to the next, and we retain nothing for those journals we do not own in paper.” (Michigan State University Library)

(7) “The Library has stopped subscribing to *Wilson Indexes* in paper. We do not have an electronic file, and we are leasing the electronic version. The Library is not archiving anything electronic, partly because of licensing agreements, and also because of technological issues. This is under the control of publishers. We cannot keep backfiles and some are dropped off, i.e. the latest 3 years may be available electronically but if we stopped the print subscription four or five years ago, there is a gap. Who will fill this gap?” (Brown University Library)

9. Has the use of technological measures that effectively control access to copyrighted works created problems with respect to the preservation of such works? If so, how? Are there specific works or classes of works that have been affected in this respect? If so, identify them and explain how they have been affected.

The comments with respect to Question 8 apply with equal force to preservation concerns. If a library does not have an archival copy, no preservation of the work can be made. Technological measures that deny copying prevent preservation by that institution. As to classes of works affected, this is true of most electronically-delivered works. Thus, the nature of the works is less critical to the analysis than the format by which it is "permanently" stored.

From the Libraries' perspective, works that exist only on content providers' servers may be subject to corruption, sabotage, subsequent alteration and selective preservation. There are no firm statistics on the losses because the developments are so recent. However, from our institutional experience, if works are not backed up in a professional manner (appropriate storage media, care and environmental maintenance of stored works, adequate indexing, etc.) the risk of loss to authors and to society will be enormous.

One librarian trenchantly remarked: "I interpret this [question] to mean digital information on CD-ROMs, or magnetic media that we have in our possession. Under the terms of purchase we are generally not permitted to make copies, and…as these media are damaged or deteriorate the information is simply lost to humanity. Often the companies are no longer in business, and when they are still in business they frequently no longer have this older material in stock and it cannot be purchased. It might as well never have existed. In just the last week alone, we had to withdraw and discard 75 titles that were on older computer disks because we were not sure if we had the rights to transfer them to more current media — and with millions of items to keep track of and short staffing, we simply cannot devote staff resources to researching the rights of every title in order to know if we can preserve it or not. The practical consequence is that if the publisher or the laws make it difficult for cash-strapped libraries to save this material — it simply will not be saved." (University of Texas Libraries)

10. Has the use of technological measures that effectively control access to copyrighted works affected the availability of such works for nonprofit educational purposes? If so, how? Are there specific works or classes of works that have been affected in this respect? If so, identify them, explain how they have been affected, and explain whether those works or classes of works are also available in other formats to which such technological measures have not been applied.

The responses to Questions 8 and 9 must be considered as well, as the issues are interrelated. We add that educational institutions, from pre-school to post-graduate, increasingly rely on works in digital or electronic format. If access to works is denied despite the permissions established in copyright law, then the harm to teaching, scholarship and research will be profound. Certainly if a work such a book or periodical is available also in printed format, the harm to education is somewhat mitigated (although as noted above, different formats of the same work are not necessarily equivalent). However, with more works appearing only in digital form, and with the particular educational advantages associated with digital works, such as word scanning, digital works are unique for many educational purposes. The lack of suitable substitutes means the institution has no choice but to access the work subject to all the conditions and limitations imposed by the content proprietor, despite the limitations set forth in copyright law.

11. For purposes of this rulemaking, in classifying works that are to be exempted from the prohibition against circumvention of technological measures that control access, should any classes of works be defined, in part, based on whether the works are being used for nonprofit archival, preservation, and/or educational purposes? (E.g., "news broadcasts" may not be an exempted class of works, but "news broadcasts used in the course of face-to-face teaching activities of a nonprofit educational institution, in a classroom or similar place of instruction," may be an exempted class.) Explain why or why not.

The Libraries believe that it is essential for the Librarian to recognize formally that (a) owners of copyrighted works used in connection with nonprofit archival, preservation and/or educational purposes, are already subject to express statutory limitations; and (b) that persons who use works for these purposes should continue to enjoy "fair access" to all works to facilitate these principles.

First, it is difficult to identify any work, much less a class or group of works, that may not be "used in the course of face-to-face teaching activities." Under the current Copyright Act, Section 110(1) does not discriminate between works, suggesting that one may be the subject of educational analysis and another not. Section 110(1) allows that the performance or display of a work is not an infringement when it satisfies the teacher-student, face-to-face requirement. As noted in the 1976 Copyright Act House Report

> The clause covers *all types of copyrighted works, and exempts their performance or display* 'by instructors or pupils in the course of face-to-face teaching activities of a nonprofit educational institution,' whether the activities take place 'in a classroom or similar place devoted to instruction. H.Rep. No. 94-1476 (94th Cong., 2nd Sess.) ("House Report") at 81 (emphasis added).

Even motion pictures, which are among the most protected works, may be performed in a classroom for teaching purposes, provided the copy was "lawfully made." 17 U.S.C. Section 110(1). The new access requirements of the DMCA notwithstanding, a teacher and her/his pupils should be able to explore the nature and content of all kinds of works in an educational setting without fear of financial liability or injunction.

Second, the statutory limitation in Section 108 of the Act, as amended, defining the role of libraries to reproduce copies of works for archival and preservation, covers virtually all works.

Even though Section 108(i) provides that the rights of reproduction and distribution exclude "a musical work, a pictorial, graphic or sculptural work, or a motion picture or other audiovisual work other than an audiovisual work dealing with news," there is no limitation on the kinds of works that are covered under the permitted library or archives archival and preservation functions. 17 U.S.C. Section 108(b), (c). Indeed, it is impossible to imagine a modern library engaging in its core functions if it were forced to retreat from its archival and preservation responsibilities.

Even as the Congress limited the libraries and archives' reproduction and distribution activities with regard to certain works, it noted that fair use rules apply for these uses:

> Although subsection (h) [now renumbered subsection (i)] generally removes musical, graphic, and audiovisual works from the specific exemptions of section 108, *it is important to recognize that the doctrine of fair use under section 107 remains fully applicable to the photocopying or other reproduction of such works*. In the case of music, for example, it would be fair use for a scholar doing musicological research to have a library supply a copy of a portion of a score or to reproduce portions of a phonorecord of a work. Nothing in section 108 impairs the applicability of the fair use doctrine to a wide variety of situations involving photocopying o other reproduction by a library of copyrighted material in its collections, where the user requests the reproduction for legitimate scholarly or research purposes. H.Rep. No. 94-1476 (94th Cong., 2nd Sess.) at 78-79 (emphasis added).

Hence, it stands to reason that if the 1976 Act did not limit the kinds of works covered by many of the practices authorized by Sections 108 and 110(1), then the classification of works for purposes for this rulemaking should not narrow the reach of these long-standing exceptions to the rights of copyright holders. By adopting a "function-based" definition of classes of works, the Librarian should conclude that no work be automatically excluded from the exemption. Only particular classes of works for which there are established, available, non-digital alternatives should be excluded. Quite appropriately, educators, librarians and archivists should thus be given the regulatory key to permit technological access for appropriate uses in classrooms and libraries.

D. Impact on Criticism, Comment, News Reporting, Teaching, Scholarship, or Research

12. What impact has the use of technological measures that effectively control access to copyrighted works had on the ability of interested persons to engage in criticism, comment, news reporting, teaching, scholarship, or research?

See answers to questions 5, 7-11. Technological measures designed to control access by definition have the intended or unintended effect of stymieing teaching, scholarship and research. It is not to say that those engaged in that work may not have alternatives, but at present, there is no way to quantify the losses to these educational efforts. For example, certain technological measures in works licensed or sold to libraries are programmed to deny access once a certain number of authorized users has been reached. If a patron is that "next user" after the preordained limit is reached, the work cannot be viewed. How often this has occurred, we cannot yet say. However, in the next few years, as more content migrates to the electronic formats where access is controlled, many persons will be affected. The harshest effects will fall on the poorer in society, who ironically will have access to the technological devices, but not the content, that is driving the electronic revolution in education.

As an example, one of our member libraries stated in response to our survey: "…Technological devices such as watermarking have affected interlibrary loan, class reserve, and classroom use in the application of fair use. Electronic journal licenses typically permit only personal copies thus eliminating any interlibrary loan or reserve use (presumably controlled by watermarking). Most journals are still available in print versions so interlibrary loan and reserves are still possible. But when publishers start eliminating print versions, such electronic restrictions will be a significant problem unless electronic versions are treated just as print version where fair use applies." (Purdue University Library)

13. What impact has the use of technological measures that effectively control access to copyrighted works had on the ability of interested persons to engage in non-infringing uses of such works, including fair use and activities permitted by exemptions prescribed by law?

See answers to questions 5, 7-12. At base, the purpose of many technological measures is to ensure a controlled licensing scheme as the paradigm for accessing and using works. Licensing is a valid mechanism to obtain payment for each viewing or copy of an electronic work.

However, it is the antithesis of a scheme that relies on fair use and other statutory exemptions as conditions on the grant of otherwise exclusive rights to authors. The statutory limitations permit people to use works *without prior approval, license or consent*, for defined purposes. By restricting access and regulating copying, redistribution and reuse, technological measures may prevent fair use and other statutory exemptions from playing any role in the future use of works. The Libraries believe it is Congress' mandate to the Librarian is to ensure this does not occur. The regulatory approach and authority granted the Librarian was designed

> … to provide greater flexibility in enforcement. … The goal of the proceeding is to assess whether the implementation of technological protection measures that effectively control access to copyright works is adversely affecting the ability of individual users to make lawful uses of copyrighted works. Many such technological protection measures are in effect today: these include the use of "password codes" to control authorized access to computer programs, for example, or encryption or scrambling of cable programming, videocassettes, and CD ROMs. More such measures can be expected to be introduced in the near future. *The primary goal of the rulemaking proceeding is to assess whether the prevalence of these technological protections, with respect to particular categories of copyrighted materials, is diminishing the ability of individuals to use these works in ways that are otherwise lawful*. H. Rep. 105-551, Part II *supra* at 36-37 (emphasis added).

Are measures now in place harming the public's ability "to use works in ways that are otherwise lawful?" Many of our librarians comments noted above indicate the answer is yes. Here are two additional comments:

(1) "Document delivered articles, for which we pay copyright, are delivered with a technological device that prevents a second viewing or online storage. So, to get the item again, we have to pay again. A situation that doesn't exist when we purchase a periodical in print." (University of Oklahoma Library)

(2) "Some journals from the American Chemical Society request that they are allowed to send "cookies" to users workstations to monitor use. When users refuse this invasion of privacy they are denied access at their workstations even though the organization has a subscription." (University of New Mexico)

14. Are there specific works or classes of works with respect to which the ability of interested persons to engage in criticism, comment, news reporting, teaching,

scholarship, or research has been hindered because of the implementation of such technological measures? If so, identify them, explain how such activities have been hindered, and explain whether those works or classes of works are also available in other formats to which such technological measures have not been applied.

See answers to previous questions 8-13.

15. Are there specific works or classes of works with respect to which the ability of interested persons to engage in non-infringing uses has been hindered because of the implementation of such technological measures? If so, identify them, explain how such activities have been hindered, and explain how such activities have been hindered, and explain whether those works or classes of works are also available in other formats to which such technological measures have not been applied.

See answers to previous questions 8-13.

16. For purposes of this rulemaking, in classifying works that are to be exempted from the prohibition against circumvention of technological measures that control access, should any classes of works be defined, in part, based on whether the works are being used for the purposes of criticism, comment, news reporting, teaching, scholarship, or research? Explain why or why not.

See answers to questions 2 and 11. Current copyright law does not limit the kinds of works for which fair use or in-class teaching can be made. The Libraries believe that the explicit intent of Congress, as set forth in Section 1201(c)(1), was intended to reinforce longstanding copyright policy. This is not to say that if two versions of a work are available, one protected by technological measures that control access and that is, that a user should be granted access to both works without consideration of the technological measure in place. Rather, it is necessary, as we set forth in answer to question 2, to consider relevant criteria to determine the circumstances under which an exemption should be permitted. Merely because a work is protected by a technological measure should not prevent a person from making non-infringing uses allowed by the Act.

17. For purposes of this rulemaking, in classifying works that are to be exempted from the prohibition against circumvention of technological measures that control access, should any classes of works be defined, in part, based on whether the works are being used in ways that do not constitute copyright infringement, e.g. as fair use or in a manner permitted by exemptions prescribed by law? Explain why or why not.

The Libraries believe that the answers provided to questions 2, 11, 13 and 16 respond to question 17. The Libraries strongly favor an exemption that allows non-infringing uses of works cognizable today to occur tomorrow. This means, logically, that the class of works should be defined, in part, according to the ways they are being used because that is precisely how the limitations on the otherwise exclusive rights of copyright holders are phrased. Different limitations apply to different works. However, when it comes to Section 107 (17 U.S.C. § 107) and other provisions like Section 110(1), we are not aware of any particular class of works that would be outside the scope of fair use.

E. Effect of circumvention on the Market for or Value of Copyrighted Works

18. In what ways can technological measures that effectively control access to copyrighted works be circumvented? How widespread is such circumvention?

Content protected by technological measures may be circumvented at various points in the distribution process, from the content seller's server to the user device.[6] The actual ability of lawfully-motivated users to circumvent technological measures that effectively control access remains quite uncertain.

19. Has such circumvention (or the likelihood of circumvention) had any impact on the price of copyrighted works? Please explain.

Many technological measures will require additional hardware and software to be present in the playback or reader devices, to be imbedded in the work itself, or both. This additional technology, coupled with possible licensing fees paid by the manufacturers for access to proprietary technology, is likely to raise the price of works and of the devices that access them.

20. Has such circumvention (or the likelihood of circumvention) had any impact on the availability of copyrighted works? In particular formats or in all formats? Please explain.

The Libraries have heard public statements from industry and press accounts that have stated that certain products are being held back in certain formats pending the development of secure distribution technology. For example, some concerns were expressed by the industry that the

recent cracking of the DVD code would result in popular movies not being made available in that format. Press accounts tracing the development of the Secure Digital Music Initiative have quoted industry sources as saying they would not make their catalogs available on the Internet until such a secure standard was available.

However, the Libraries respectively contend that this is an irrelevant issue for this rulemaking. We are not arguing for or against the existence of these technologies or their utility, nor that they will provide incentives for industry to make works available in new digital forms. Rather, we urge that an exemption that covers lawful access and use would be an irrelevant factor in such marketing decisions.

21. Has such circumvention had any other impact on the marketing of copyrighted works? If so, please explain the impact and which works or classes of works have been affected.

See answer to question 20.

22. Do the answers of any of these questions relating to the effects of circumvention on the market for or value of copyrighted works depend upon the class of work? Please explain.

See answer to question 20.

F. Other Factors and Questions

23. For purposes of this rulemaking, what criteria should be used in determining what is a "class" of copyrighted works?

See answer to questions 2, 11, 14-17. The Libraries particularly emphasize that only "works protected under this title" are covered. Thus, all works of the federal government, works covered by Section 108(h) as amended by the Digital Millennium Copyright Act of 1998, and all public domain works are outside the scope of Section 1201.

In the aggregate, libraries provide the widest possible range of information services to their users. That is their job. They specialize, and not every library provides every service or supports

all information needs. Research libraries, for example, are more likely to have archiving and long-term access missions, while small public libraries may not. But, for nearly every information product, it is the mission of some libraries to provide unfettered, lawful access for its community of users. Thus, all categories of copyrighted works should be covered by this rulemaking.

Furthermore, the Libraries are at loss to identify any specific information products that could or would not be offered in digital formats in the near future, and it is a reasonable presumption that those works will be offered in forms protected by technological measures. Therefore, we believe that the exemption should address all electronic works marketed and sold to libraries, archives and educational institutions. Applying the exemption only to lawful uses of such works would then substantially narrow the reach of the exemption. Additionally, determining specific institutions or groups of institutions that might be responsible, in particular, for the archiving or preservation of specific classes of works could permit a narrowing of the exemption as applied to those function.

24. With respect to any adverse effect of use of or access to copyrighted works that has been identified in response to any of the preceding questions, is there an explanation for the adverse effect other than the presence of technological measures that effectively control access to copyrighted works?

Technological measures are only one part of the complete business strategy through which information products are made available. In fact, rather than technological measures being used simply to protect against "piracy," we have identified many instances where they are being or will be used to support a broad range of new marketing strategies, particularly "pay per use" and "superdistribution" business models.

Nevertheless, even in cases where other explanations such as licensing or marketing strategies are offered as explanations for adverse effects, it is the existence of technological measures as enforcement mechanisms that make such strategies possible.

25. Has the use of technological measures that effectively control access to copyrighted works resulted in making copyrighted works more widely available? Please explain.

Our research into technology and the current experience of libraries has not indicated that technological measures have facilitated the availability of works. Indeed, since the purpose of these measures is to restrict and control access, it is hard to imagine such an effect.
Some providers have stated that without technological measures, they will not make their works available in electronic form. With such measures, they argue, they will be able to bring more works to market and, thus, in that sense increase the number of works in circulation. However, such an effect is the result of deliberate, albeit shortsighted marketing strategies of the industry, not a direct effect of technological measures, themselves.

Further, this argument has no bearing on the effect of or need for an exemption to section 1201(a) and, thus, has no bearing on this rulemaking. The Copyright Office is not deliberating the general effectiveness or desirability of technological measures as aids to the information market (although that seems to be an open issue and there are many views on all sides of the questions even within the content industry). Rather, the Office is considering whether to exempt users of certain classes of works from criminal and civil penalties when their use is non-infringing. The concern is with products that are available and that have technological measures protecting them. An exemption such as the one we recommend would not decrease the amount or quality of information made available to the community and it would most certainly increase its usability.

26. Has the use of technological measures that effectively control access to copyrighted works resulted in facilitating lawful uses of copyrighted works?

See our answer to question 25 above.

27. Are there other factors that should be taken into account? If so, please identify and address those factors.

See previous answers.

28. What other comments, if any, do you have?

None at this time.

29. Do you wish to testify at a hearing to be conducted by the Copyright Office in connection with this rulemaking?

The library community will be pleased and eager to participate in hearings that the Copyright Office may schedule on this subject. In fact, we urge the Office to schedule at least two, possibly more such hearings around the country to assure full public input to its deliberations. To get a complete picture of the user perspective and potential impacts, the Office should solicit testimony from librarians, educators, researchers, and representatives from the consumer, civil liberties and civil rights communities. The Libraries also believe that input from the economics community, particularly from experts who have been studying the evolution of the electronic information markets would provide useful insight into the likely impacts of technological measures on marketing practices and prices. We would be pleased to suggest names of potential witnesses.

On behalf of:

American Library Association
American Association of Law Libraries
Association of Research Libraries
Medical Library Association
Special Libraries Association

Respectfully submitted,

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